

	Application No.	Applicant(s)
Notice of Allowability	10/512,127	HASHIMOTODANI ET AL.
	Examiner	Art Unit
	Thur. V. Trop	2021
	Thuy V. Tran	2821
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communicatio GHTS. This application is subject	oplication. If not included n will be mailed in due course. THIS
1. $\boxtimes$ This communication is responsive to <u>amendment submitted</u>	<u>d on 01/03/2006</u> .	
2. ☑ The allowed claim(s) is/are <u>1-3,5-7 and 10-14</u> .		
3. ☑ Acknowledgment is made of a claim for foreign priority un  a) ☑ All b) ☐ Some* c) ☐ None of the:		
1.  Certified copies of the priority documents have		
2. Certified copies of the priority documents have	• • • • • • • • • • • • • • • • • • • •	
3. Copies of the certified copies of the priority doc	cuments have been received in this	national stage application from the
International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>		
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	t be submitted.	
(a)  including changes required by the Notice of Draftspers	on's Patent Drawing Review ( PTO	-948) attached
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date	·	
(b) including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the	Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the		
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I</li> </ol>		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 Notice of Informal I	Patent Application (PTO-152)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary	
	Paper No./Mail Da	ate
<ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 01/03/2005</li> </ol>	8), 7. ⊠ Examiner's Amend	menvComment
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛭 Examiner's Statenh	ent of Reasons for Allowance
	PRI	THUÝ V.TRAN MARY EXAMINER

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## **DETAILED ACTION**

This is a response to the Applicants' amendment submitted on 01/03/2006. In virtue of this amendment:

- Claims 4, 8-9, and 15 have been canceled; and thus,
- Claims 1-3, 5-7, and 10-14 are now presented in the instant application.

#### Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

For clarity, the following amendment is made to update the related data of the instant application including:

In the specification, in page 1, after the title and before "FIELD OF THE INVENTION", the following has been inserted:

--This Application is a National Phase Application under 35 U.S.C. 371 claiming the benefit of PCT/JP03/08447 filed on 07/02/2003, which has the priority based on Application No. Japan 2002-192881 filed on 07/02/2002.--

## Allowable Subject Matter

2. Claims 1-3, 5-7, and 10-14 are allowed.

## Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose or fairly suggest:

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• A compact self-ballasted electrode-less discharge lamp wherein a center portion of a portion around which the coil is wound in the longitudinal direction of the core is positioned within a range that is apart from a plane on which the largest diameter of the bulb is located by a distance from not less than 8mm to not more than 20mm toward the ballast circuit side, in combination with the remaining claimed limitations as called for in independent claim 1 (claims 2-3 are allowed since they are dependent on claim 1);

- A compact self-ballasted electrode-less discharge lamp wherein: a largest diameter of the bulb is set in a range from not less than 55 mm to not more than 75 mm; a bulb wall loading of the bulb during a stable lighting operation is set in a range from not less than 0.05 W/cm2 to less than 0.07 W/cm2; a ratio (h/D) of a height (h) of the bulb based upon an end face of the opening section in the recessed portion to the largest diameter (D) of the bulb is set in a range from not less than 1.0 to not more than 1.3; and the excitation coil is constituted by a core and a coil wound around the core; and a center portion of a portion around which the coil is wound in the longitudinal direction of the core is virtually positioned on a plane within which the largest diameter of the bulb is located, in combination with the remaining claimed limitations as called for in independent claim 5 (claims 6-7 and 10-12 are allowed since they are dependent on claim 5);
- An electrodeless discharge lamp lighting device wherein the diameter Dc of a portion positioned on the side opposite to the opening section of the recessed portion is greater than the diameter of a portion corresponding to virtually a center portion of

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the recessed portion in the longitudinal direction of the exitation coil, in combination with the remaining claimed limitations as called for in independent claim 13; and

• An electrodeless discharge lamp lighting device wherein the diameter Dc of a portion positioned on the side opposite to the opening section of the recessed portion is greater than the diameter of a portion corresponding to virtually a center portion of the recessed portion in the longitudinal direction of the exitation coil, in combination with the remaining claimed limitations as called for in independent claim 14.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## **Inquiry**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

02/20/2006

THUY V. TRAN
PRIMARY EXAMINER

**AMENDMENTS TO THE DRAWINGS** 

The attached "Replacement Sheets" of drawings include changes to Figures

12 and 13. The attached "Replacement Sheets," which include Figures 12 and 13

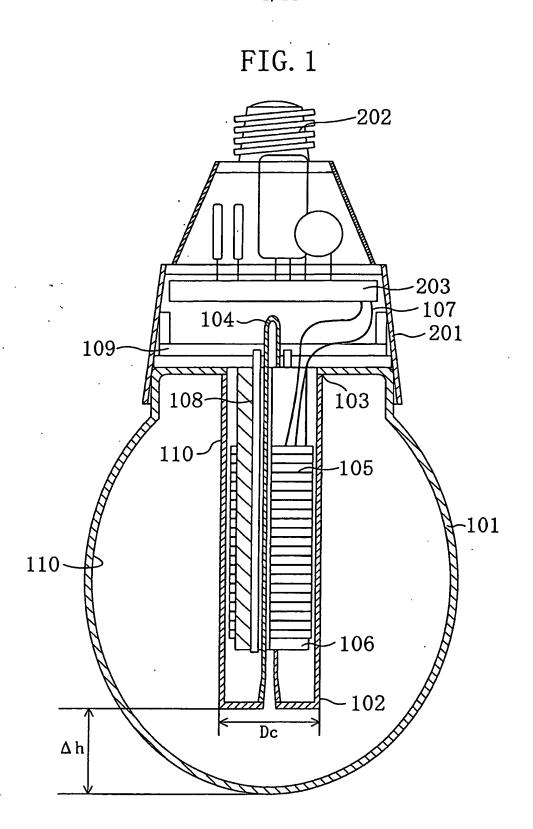
and label them as "Prior Art", replaces the original sheets including Figures 12 and

13.

Attachment: Replacement Sheet(s) 12/14 and 13/14

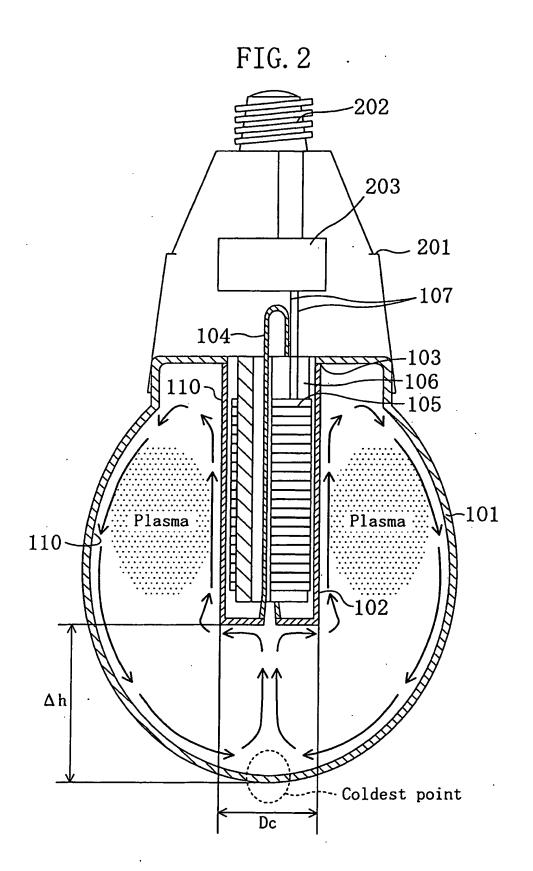
Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Inventors: Kiyoshi HASHIMOTODANI, et al. Atty. Ref.: 5077-000225/NP

10/512127



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Inventors: Kiyoshi HASHIMOTODANI, et al.
Atty. Ref.: 5077-000225/NP

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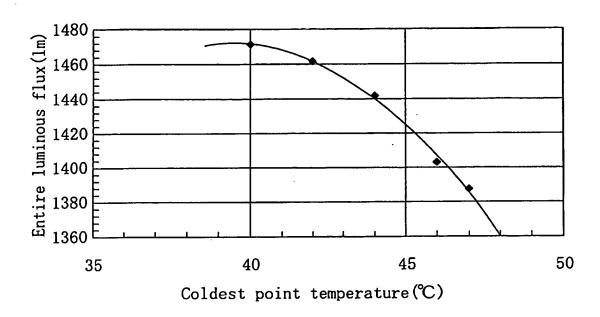


Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND

ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Inventors: Kiyoshi HASHIMOTODANI, et al. Atty. Ref.: 5077-000225/NP

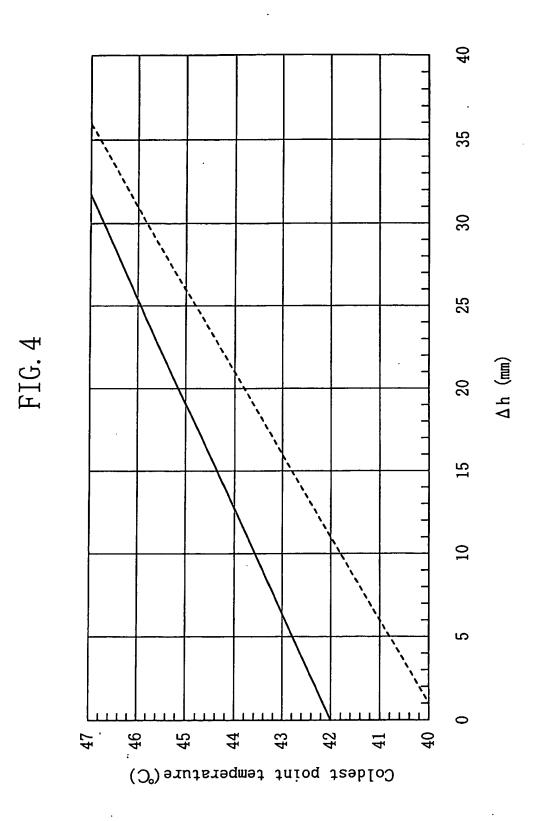
10/512127

FIG. 3



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Inventors: Kiyoshi HASHIMOTODANI, et al. Atty. Ref.: 5077-000225/NP

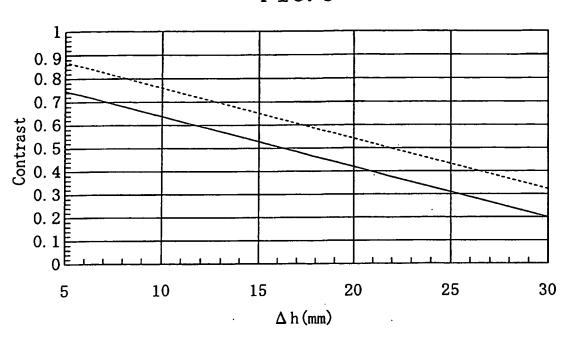
10/512127



Title: COMPACT SELF-BALLAST, ED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Inventors: Kiyoshi HASHIMOTODANI, et al. , Atty. Ref.: 5077-000225/NP

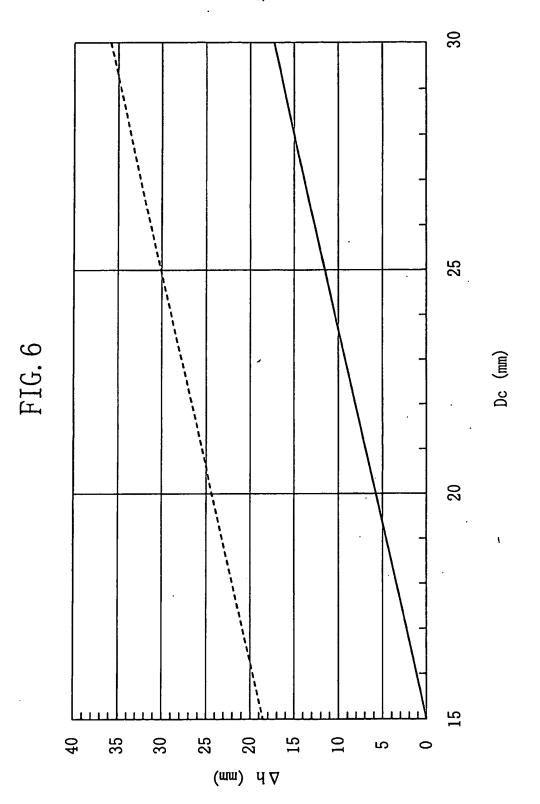
10/512127

FIG. 5



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE

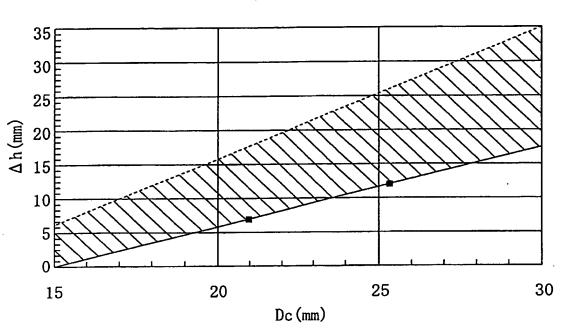




Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Inventors: Kiyoshi HASHIMOTODANI, et al. Atty. Ref.: 5077-000225/NP

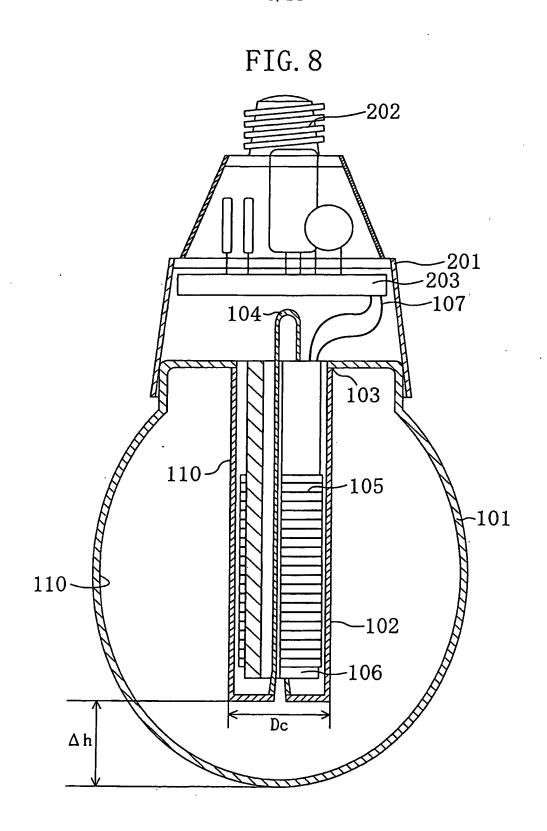
10/512127

FIG. 7



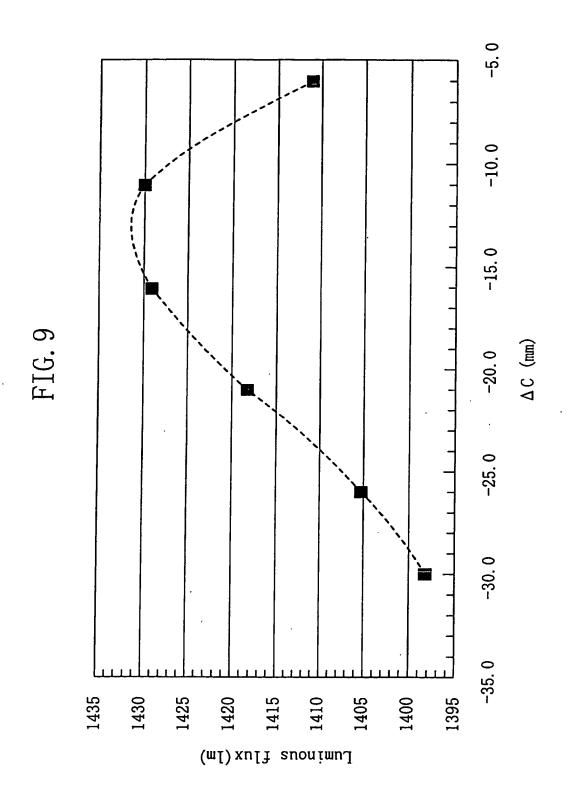
Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Inventors: Kiyoshi HASHIMOTODANI, et al. Atty. Ref.: 5077-000225/NP

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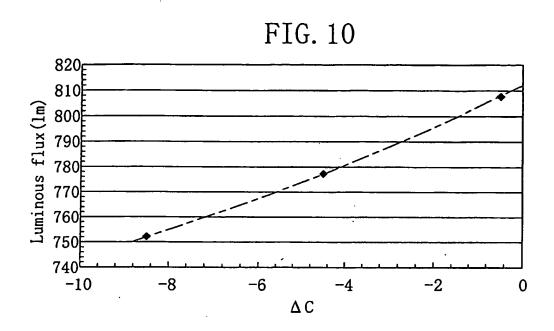
Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE : Inventors: Kiyoshi HASHIMOTODANI, et al. Atty. Ref.: 5077-000225/NP

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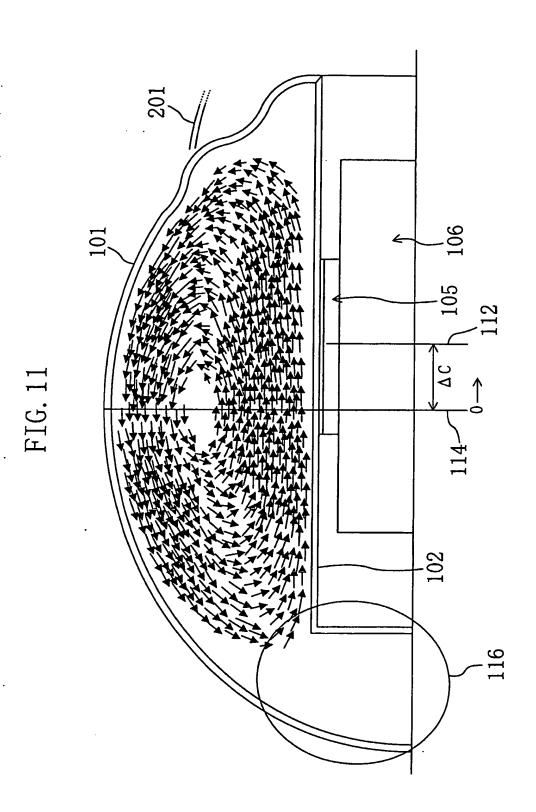
Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Inventors: Kiyoshi HASHIMOTODANI, et al. : Atty. Ref.: 5077-000225/NP

10/512127



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Flux 13 (hventors: Kiyoshi HASHIMQTODANI, et al. Atty. Ref.: 5077-000225/NP

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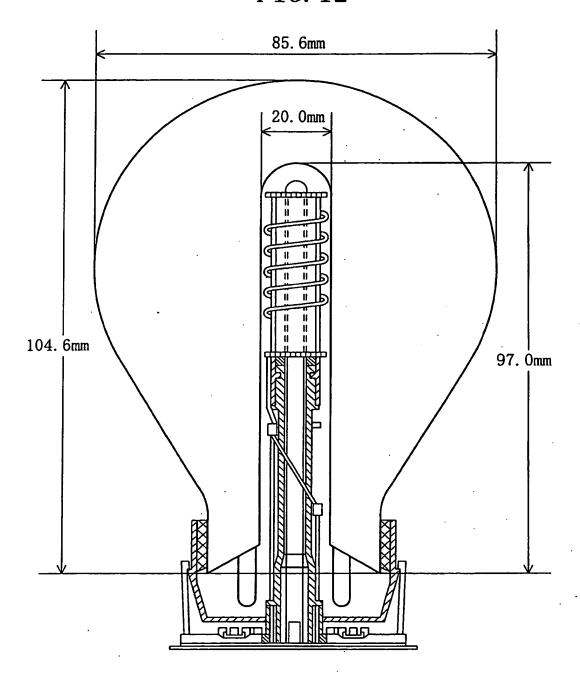
Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE

Inventors: Kiyoshi HASHIMOTODANI, et al.

Atty. Ref.: 5077-000225/NP

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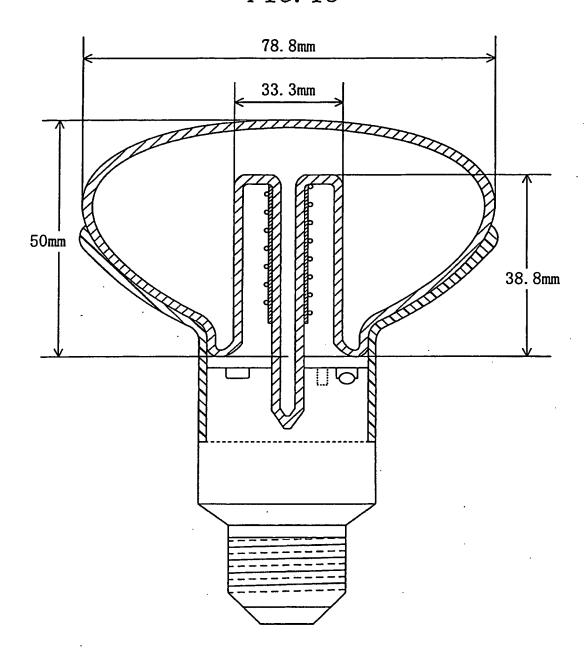
FIG. 12



# Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE inventors: Kiyoshi HASHIMOTODANI, et al. Atty. Ref.: 5077-000225/NP

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FIG. 13

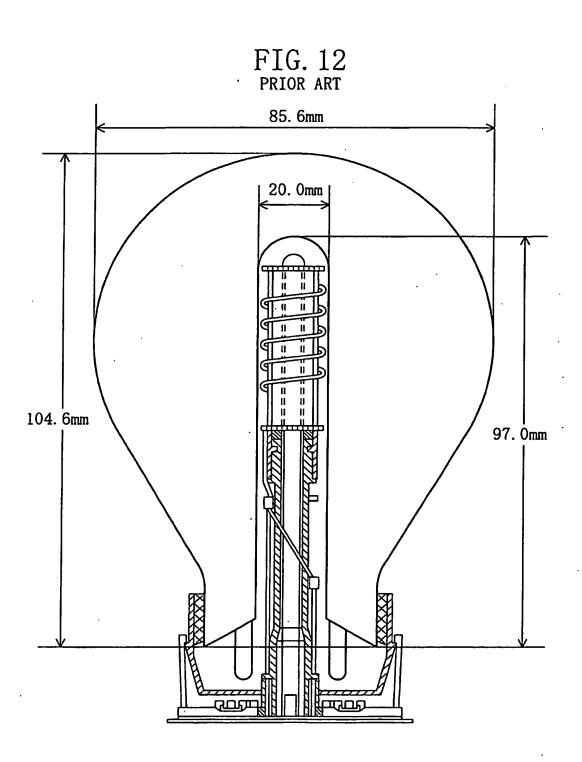




Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE Inventors: Kiyoshi HASHIMOTODANI, et al.

Atty. Ref.: 5077-000225/NP
REPLACEMENT SHEET

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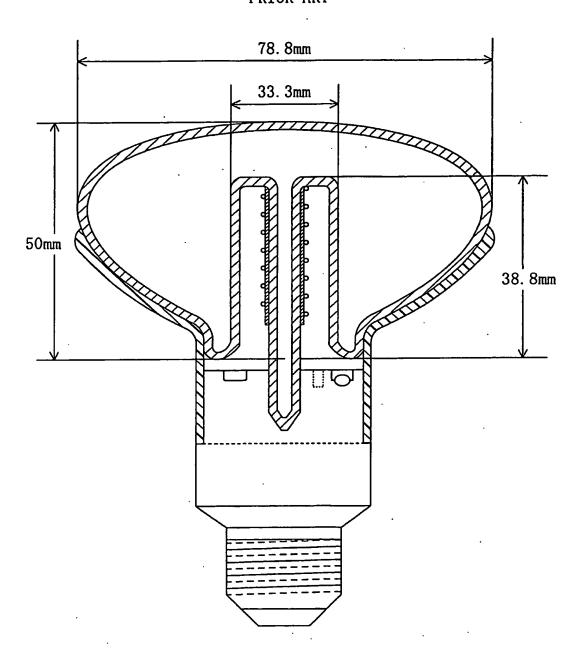




Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND

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FIG. 13 PRIOR ART



Title: COMPACT SELF-BALLASTED ELECTRODELESS DISCHARGE LAMP AND ELECTRODELESS-DISCHARGE-LAMP LIGHTING DEVICE (I) (I) (Inventors: Kiyoshi HASHIMOTODANI, et al.

Atty. Ref.: 5077-000225/NP

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FIG. 14

